

Behaviorism: Are Reports of Its Death Exaggerated?

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Despite reports that behaviorism is dead or dying, examination of the data indicates otherwise. The opinions of psychology historians, the number of professional associations devoted to behaviorism, and the increasing number of behavioral publications all support the conclusion that behaviorism is vital and growing.

Several times, recently, we have heard psychologists of non-behavioral persuasion assert that behaviorism (or sometimes behavior analysis, behavior modification, or behavior therapy) is dead, or at least dying. We have believed that the appropriate reply might be like that of Mark Twain when, reading of his own death in the London papers, he cabled the Associated Press, "The reports of my death are greatly exaggerated" (Bartlett, 1891/1980). Unfortunately, we have been without credible data with which to make such a reply. The purpose of the present paper is to offer data relevant to evaluating claims of the death of behaviorism.

We did not attempt to evaluate whether behaviorism is stronger than other perspectives. Nor did we attempt to evaluate whether changes in the strength of behaviorism were of greater proportion than changes in other perspectives. Rather, we simply evaluated whether behaviorism is declining, remaining stable, or growing in the absolute quantity of its scholarly activity. Neither did we attempt to discriminate behavior analysis from the re-

mainder of behaviorism, as that seemed too difficult and unreliable a discrimination.

THE DATA

We examined three sources for data that could provide information about the vitality of behaviorism: (1) the opinions of historians of psychology, (2) the number of professional associations devoted to a behavioral perspective, and (3) the number of scholarly publications that are exclusively or primarily behavioral.

Historians

Gilgen (1981) surveyed 13 authors of books on the history of psychology, asking them to rate the major events and influences in psychology since World War II. Highest rated was "the general growth of psychology." Tied for second were "the contributions of B. F. Skinner" and "the increasing influence of cognitive psychology." Skinner's contributions, then, appear quite profound.

Professional Associations

The Association for Advancement of Behavior Therapy began in 1966, and by 1974 had grown to 1,584 members, and by 1981 to 3,309. Growth has continued through 1984, the most recent year for which data are available, to 3,642 (M. J.

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Eimer, Executive Director, personal communication, December, 1985).

The Association for Behavior Analysis was founded in 1974 under the name Midwest Association of Behavior Analysis. Its membership has grown steadily to a total of 1,946 in 1984 (*ABA Newsletter*, 1984). Seven percent of its membership are from 21 foreign countries. Its 1984 membership directory showed that the Association is well represented in academia also, with 21% (418) of its members listing an academic affiliation. A total of 193 colleges and universities list one or more members.

The American Psychological Association's (APA) Division 25 (The Experimental Analysis of Behavior) newsletter (*Division 25 Recorder*, 1984) provides data regarding that group of behavior analysts. APA Division 25 showed steady growth through the early and mid-1970s; however, its membership has leveled off at between 1,000 and 1,500 since then, despite the continued growth of APA. In fact, 1984 showed a slight decline (2.5%, $n = 38$) from 1983. This may have been due to the more exclusively behavioral of the organizations drawing members and potential members away from APA (*Division 25 Recorder*, 1984), partly, we suspect, because of the nature of many of APA's activities and divisions.

A number of other organizations for behaviorists have also formed, mostly since 1975, as best we can determine. Internationally these include: the Belgium Association for the Study, Modification and Therapy of Behavior, Behavior Analysis in Ireland, the Italian Association for the Analysis and Modification of Behavior, the Uruguayan Society for Behavior Analysis and Therapy, the European Association for Behavior Analysis, the Mexican Association for Behavior Analysis, and the Latin American Association of Behavior analysis.

Regional, state, and local associations within the United States have also been formed—again, all since 1975, to the best of our knowledge. The following is surely only a partial list of the larger of them: the New England Society of Behavior Analysis and Therapy, the Southeastern

Association for Behavior Analysis, the Northern California Association for Behavior Analysis, the Southern California Association for Behavior Analysis, the Florida Association for Behavior Analysis, the Georgia Association for Behavior Analysis, the Minnesota Association for Behavior Analysis, the Berkshire Association for Behavior Analysis, the Chicago Association for Behavior Analysis, and the Houston Association for Behavior Analysis.

Publications

Books and journals. A large number of books and journals about basic, applied, and theoretical issues in behavior analysis have been published. Rutherford (1985), for instance, found that over 850 books have been published, over half of these since 1976.

Journals. Many journals appear to be either fairly behavioral or highly behavioral in their orientation. Initially, we believed that we could discriminate reliably how behavioral their orientations were—based on the journals' editorial policy statements, statements of purpose, editorial boards' composition, and the kinds of articles they published—so that we could plot the growth or decline in behavioral journals across years. However, rather than check the reliability of these judgements across any two of us or across other observers who might be biased by their being part of our social network (or who might be too naive to make the subtle discriminations involved), we chose to assess the accuracy of our judgements by asking the journals' editors for information that would confirm or disconfirm our judgements.

First, we identified 23 journals that we judged as behavioral and 18 that we judged to be not particularly behavioral; the latter represent most of scholarly psychology because they were all of the journals published by APA. Second, we surveyed the editors of both groups of journals, asking them to rate the orientation of their journal on a five point scale (highly behavioral to other-than-behavioral), and to estimate the percentage of

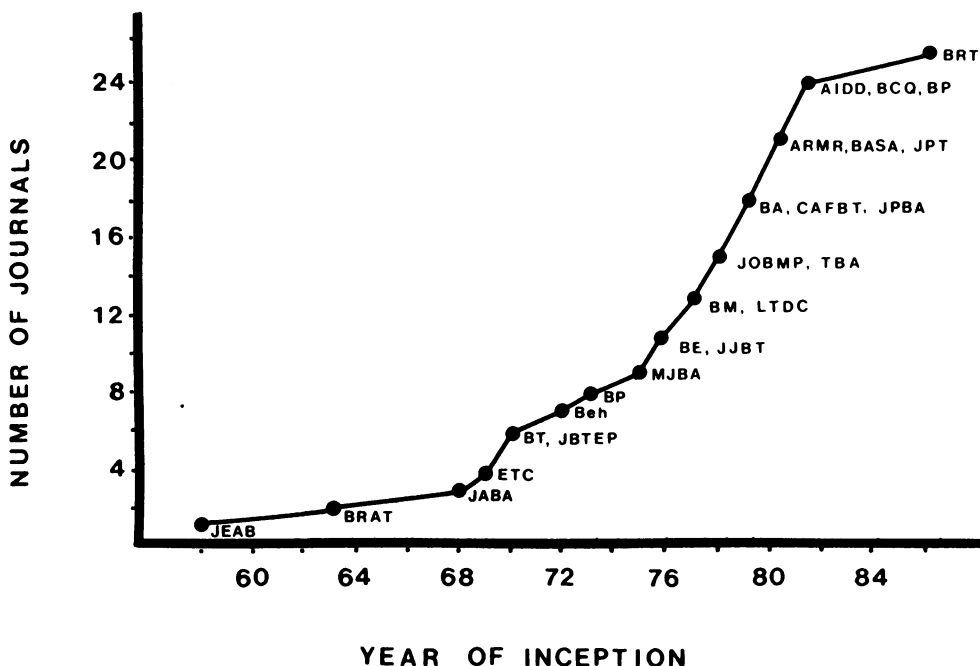


Figure 1. Cumulative number of behavioral journals published per year.

their journal's editorial board members that are behaviorally oriented.

The survey return rates were 52.1% ($N = 12$) for the behavioral journals and 50% ($N = 9$) for the APA journals. Two APA editors, however, returned the survey uncompleted, saying that the questions were not applicable to their journals. Thus, the results below represent only 38.9% ($N = 7$) of the APA journals.

On the five-point scale, the mean editors' ratings were 1.2 and 3.7 ($P < .01$) for the behavioral and APA journals, respectively. The behavioral journal editors' ratings were 1 or 2 in all cases, while APA editors' ratings were always 3 or 4. The editors' mean ratings of the percentage of behaviorally oriented board members were 92.1% and 16.4% ($P < .01$), for the journals we had judged as behavioral and for the APA journals, respectively. Percentages ranged from 60 to 100 for the behavioral journals, from 0 to 35 for the APA journals.

Thus, it appears that our judgements of journals as behavioral matches well with the editors' judgements. The behav-

ioral journals are listed in Table 1 by year of inception. We have omitted journals that have stopped publication, and we omitted newsletters.

Figure 1 presents these data cumulatively, with each point on the graph representing the total number of behavioral journals being published in that year, exclusive of journals that have since terminated. Obviously, to the extent that journals represent activity in a field, behaviorism has been growing at a rapid pace. Whether this is a more rapid pace than the growth of related disciplines with which behaviorism and behavior analysis overlap is not known, however.

DISCUSSION

These data, taken together, support the contention that behaviorism is a vital, growing area of behavioral science, and that behavior analysis appears to represent a substantial portion of behaviorism. Behaviorism has spawned activity that ranges from the theoretical—as reflected in journals such as *Behaviorism*

TABLE 1
Behavioral Journals

Date of inception	Title
1958	<i>Journal of the Experimental Analysis of Behavior</i> (JEAB)
1963	<i>Behavior Research and Therapy</i> (BRAT)
1968	<i>Journal of Applied Behavior Analysis</i> (JABA)
1969	<i>Education and Treatment of Children</i> (ETC) (originally <i>School Applications of Learning Theory</i>)
1970	<i>Behavior Therapy</i> (BT)
1970	<i>Journal of Behavior Therapy and Experimental Psychiatry</i> (JBTEP)
1972	<i>Behaviorism</i> (BEH)
1973	<i>Behavioral Psychotherapy</i> (BP)
1975	<i>Mexican Journal of Behavior Analysis</i> (MJBA)
1976	<i>Behavioral Engineering</i> (BE)
1976	<i>Japanese Journal of Behavior Therapy</i> (JJBT)
1977	<i>Behavior Modification</i> (BM)
1977	<i>La Technologie du Comportement</i> (LTDC)
1978	<i>Journal of Organizational Behavior Management</i> (JOBM)
1978	<i>The Behavior Analyst</i> (TBA)
1979	<i>Behavioral Assessment</i> (BA)
1979	<i>Child and Family Behavior Therapy</i> (originally <i>Child Behavior Therapy</i>) (CAFBT)
1979	<i>Journal of Psychopathology and Behavioral Assessment</i> (originally <i>Journal of Behavioral Assessment</i>) (JPBA)
1980	<i>Applied Research in Mental Retardation</i> (ARMR)
1980	<i>Behavior Analysts and Social Action</i> (originally <i>Behaviorists for Social Action</i>) (BASA)
1980	<i>Journal of Precision Teaching</i> (JPT)
1981	<i>Analysis and Intervention in Developmental Disabilities</i> (AIDD)
1981	<i>Behavioral Counseling Quarterly</i> (BCQ)
1981	<i>Behavioural Processes</i> (originally <i>Behaviour Analysis Letters</i>) (BP)
1986	<i>Behavioral Residential Treatment</i> (BRT)

and much of *The Behavior Analyst*, and in books such as Skinner (1969), Staats (1975), or Bernstein and Howe (1982)—to the practical, as reflected in journals such as the *Journal of Applied Behavior Analysis*, *Behavior Modification*, and *Behavior Therapy*, and in books such as the

Progress in Behavior Modification series (e.g., Hersen, Eisler, & Miller, 1979), the *Advances in Clinical Child Psychology* series (e.g., Lahey & Kazdin, 1984), and the *Annual Review of Behavior Therapy: Theory and Practice* (e.g., Franks, Wilson, Kendall, & Brownell, 1984). We believe that behaviorism has recently undergone an “adolescent” growth spurt, and anticipate that the rapid growth of journals, at least, will level off.

Our own assessment of the vitality of behaviorism, including behavior analysis, is that psychology and other sciences and professions are increasingly adopting its perspectives and technologies, albeit piecemeal. Admittedly, cognitive perspectives are particularly popular today. Nonetheless, although much of cognitive psychology is mentalistic (Morris, Higgins, & Bickel, 1982) and dissonant with a natural science approach (Bijou, 1979; Skinner, 1977), even it is occasionally influenced by behaviorism (e.g., Meichenbaum, 1977). We expect that as the years pass, the distinction between behavioral journals, books, and organizations and non-behavioral ones will become more difficult to detect because behaviorism—no doubt in altered form, since it is an evolving science—will be the perspective underlying all of behavioral science and technology.

In summary, we believe that reports of the death of behaviorism are indeed “greatly exaggerated.” The present data support such a conclusion. Moreover, we see behaviorism as growing and spreading rapidly, though more quietly than in the past 10 or 20 years.

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